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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,374	09/27/2001	Sahil Bansal	CX03015USU(00CXT0352D)	5097

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EXAMINER	
AHMED, SALMAN	
ART UNIT	**PAPER NUMBER**
2616	

DATE MAILED: 09/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding:

Office Action Summary	Application No.	Applicant(s)	
	09/966,374	BANSAL ET AL.	
	Examiner	Art Unit	
	Salman Ahmed	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 7/31/2006.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 47-50 and 52-57 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) 48-50 and 52-57 is/are allowed.

6)☒ Claim(s) 47 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 9/27/2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 47-50 and 52-57 are pending.

Claim 51 has been cancelled by the Applicant.

Claim 47 is rejected.

Claims 48-50 and 52-57 are allowed.

Claim Objections

1. Claims 54 and 56 objected to because of the following informalities:

Claims 54 and 56 depend on cancelled claim 51.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fellows et al. "DOCSISTM cable modem technology", Communications Magazine, IEEE Publication Date: March 2001, hereinafter referred to as Fellows in view of Bushmitch et al. "Supporting MPEG video transport on DOCSIS-compliant cable networks", Communications, IEEE Journal on Publication Date: Sept. 2000, hereafter referred to as Bushmitch, and in view of Cheng et al. (US PAT PUB 2003/0218622), hereinafter referred to as Cheng.

Fellows teaches a method of filtering upstream scheduling messages in a data communication system (page 202, section: Introduction, cable system) that includes a headend (page 202, section: Introduction, a cable modem termination system (CMTS)) and at least one subscriber unit (page 202, section: Introduction, a cable data system consists of multiple cable modems (CMs), in subscriber locations) wherein the system has an upstream and a downstream transmission path (page 202, section: DOCSIS protocol stack, The CM will receive an IP packet from host customer premises equipment (CPE), typically over Ethernet, and will add link encryption, mediate access to the return path, and finally modulate the data onto the cable network) the method comprising: obtaining a scheduling message from the headend (page 205 section: Obtain Upstream Parameters, the CM is looking for MAC messages that are repeatedly sent by the CMTS on all DOCSIS downstream channels), the scheduling message

having a plurality of information elements (IE's); filtering the scheduling message to identify a plurality of IEs that are associated and that correspond to a selected subscriber unit (page 205 section: Channel Acquisition: the modem first scans for a downstream channel, obtains QAM lock, and finds MPEG packets with the DOCSIS well known PID) by: filtering the scheduling message to identify well known addresses (page 205 section: Channel Acquisition: MPEG packets with the DOCSIS well known PID) using a software implementation; and filtering the scheduling message to identify IEs that are associated with the selected subscriber unit (MPEG-2 provides a mechanism to identify individual packets within an MPEG-2 stream such that a CM or set-top box can identify which packets it should decode. This mechanism, called a program identifier (PID), is present in all MPEG-2 frames. DOCSIS has declared the value OXIFFE to be the well-known PID for all CM traffic on that channel. DOCSIS CMs will only operate on MPEG packets with this PID).

Fellows does not explicitly teach storing an information set based upon the plurality of IEs obtained in the step of filtering the scheduled message into a filtered scheduling message.

Bushmitch in the same field of endeavor teaches storing an information set based upon the plurality of IEs (format is shown in Fig. 2 in page 1582, The MAP message contains a list of time intervals, the type of traffic each interval is allowed to carry, and an identifier that defines a particular cable modem) obtained in the step of filtering the scheduled message into a filtered scheduling message (page 1582, In Fig. 2, the service identifier (SID) identifies a particular upstream service flow within the

MAC domain) Bushmitch in the same field of endeavor further teaches in page 1582 and figure 2, the allocation of upstream intervals to the CMs is accomplished using MAC MAP messages sent by the CMTS periodically in the downstream direction; In Fig. 2, the service identifier (SID) which is derived from the incoming MAC MAP messages sent by the CMTS periodically, identifies a particular upstream service flow within the MAC domain.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Fellows' teaching to incorporate the well known method/standards of storing an information set based upon the plurality of IEs obtained in the step of filtering the scheduled message into a filtered scheduling message with specific information elements (IEs) as taught by Bushmitch, page 1582 and figure 2. The motivation is that it is advantageous to adapt to known methods/standards for implementation of DOCSIS based communication for following reasons: Companies actively involved in adhering to known methods/standards more frequently reap short- and long-term cost-savings and competitive benefits than those that do not. Standardization can lead to lower transaction costs in the economy as a whole, as well as to savings for individual businesses. Known methods/standards have a positive effect on the buying power of companies. Standards can help businesses avoid dependence on a single supplier because the availability of known methods/standards opens up the market. The result is a broader choice for businesses and increased competition among suppliers. Companies also have increased confidence in the quality and reliability of suppliers who use known methods/standards.

In addition, known methods/standards are used by businesses to exert market pressure on companies further down the value chain, i.e., their clients. Thus, businesses can use known methods/standards to broaden their potential markets.

Fellows and Bushmitch teaches a scheduling scheme for scheduling data transmission as described above.

Fellows and Bushmitch do not explicitly teach determining the correct identifier or address of the unit by writing a service identifier (SID) of a selected IE into a hardware input register, comparing the hardware input register contents to a hardware look-up table; storing the resulting comparison value into a hardware result register.

Cheng et al. in the similar field of endeavor teaches using hardware input register for comparing the contents to a hardware look-up table; storing the resulting comparison value into a hardware result register (page 2 section 0024, lookup table 210 consists of bits 7 through 2 of seven different registers, those registers being CRT 90, CRT 92, CRT 94, CRT 96, CRT 98, CRT 9A and CRT DEFAULT. Each of these registers is coupled to compare logic or comparison block CMP 240. Also coupled to compare logic 240 is a six bit line leading from a register CRT 12. This six-bit line leads from bits 7 through 2 of register CRT 12. Within compare logic 240 the value of CRT 12 in bits 7 through 2 is compared with the value of each of the registers in lookup table 210).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Fellows and Bushmitch's system/method by using registers and lookup tables for comparison for finding values as taught by Cheng. The

motivation is that such method of using registers and lookup tables for comparison in a computer-based system is very fast and efficient.

Allowable Subject Matter

5. Claims 48-50 and 52-57 are allowed.

Response to Arguments

6. Applicant's arguments, see pages 7-10 of the Remarks section, filed 7/31/2006, in regards to rejection of the claim 47, have been fully considered and are not persuasive.

Applicants argues that (see page 7 paragraph 3) First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Applicant further argues that, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vick, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

However, the Examiner respectfully disagrees with the assertion that the cited references cannot be combined. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary

reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art at the time the invention was made. See In re Keller 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Applicants argues that (see page 8 last paragraph) the '622 patent being in the field of endeavor of displaying VGA graphical information on a larger size of LCD display. This is not an area of endeavor of communication systems that make use of MAP messages. There are no references to communication systems or MAP messaging in the cited reference.

However, the Examiner respectfully disagrees with the assertion that the cited 622 patents is not the same field of endeavor as the instant application. They are both in the field of communication. The test for obviousness is not whether the features of using hardware registers for comparison purpose of the secondary reference be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. The Secondary reference does not need to have MAP messages to be in the field of endeavor of the primary reference. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art at the time the invention was made. See In re Keller 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Selman Ahmed whose telephone number is (571) 272-8307. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hessian Kazoo can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit 2616

SA
09/06/2006

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